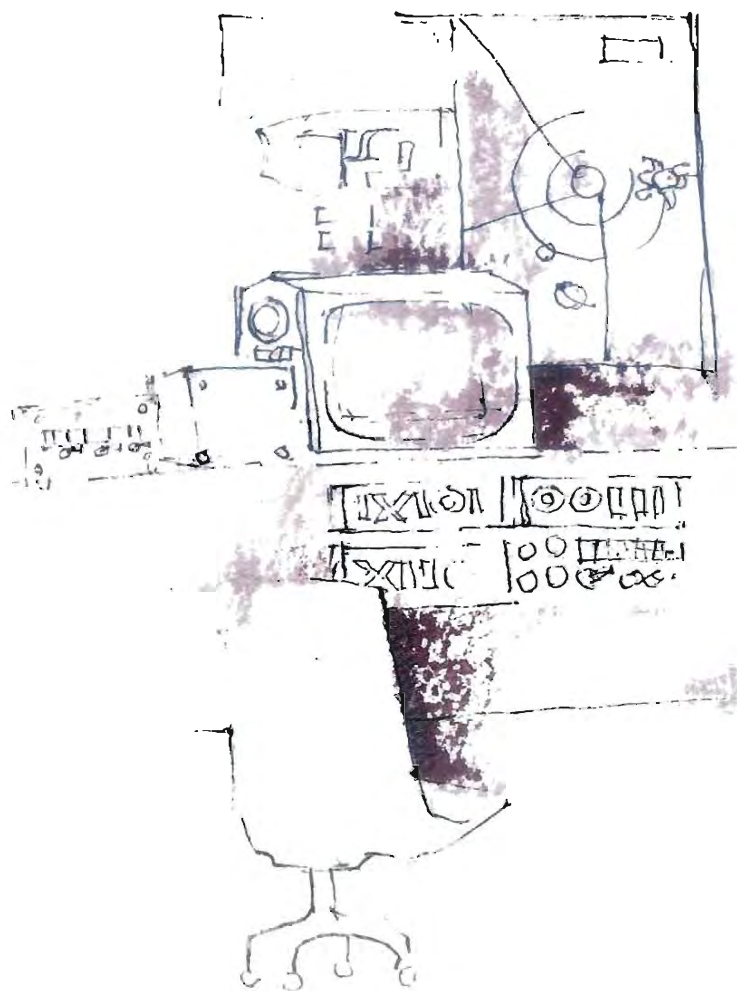




THE COSMIC GIFT

Mohan Sundara Rajan





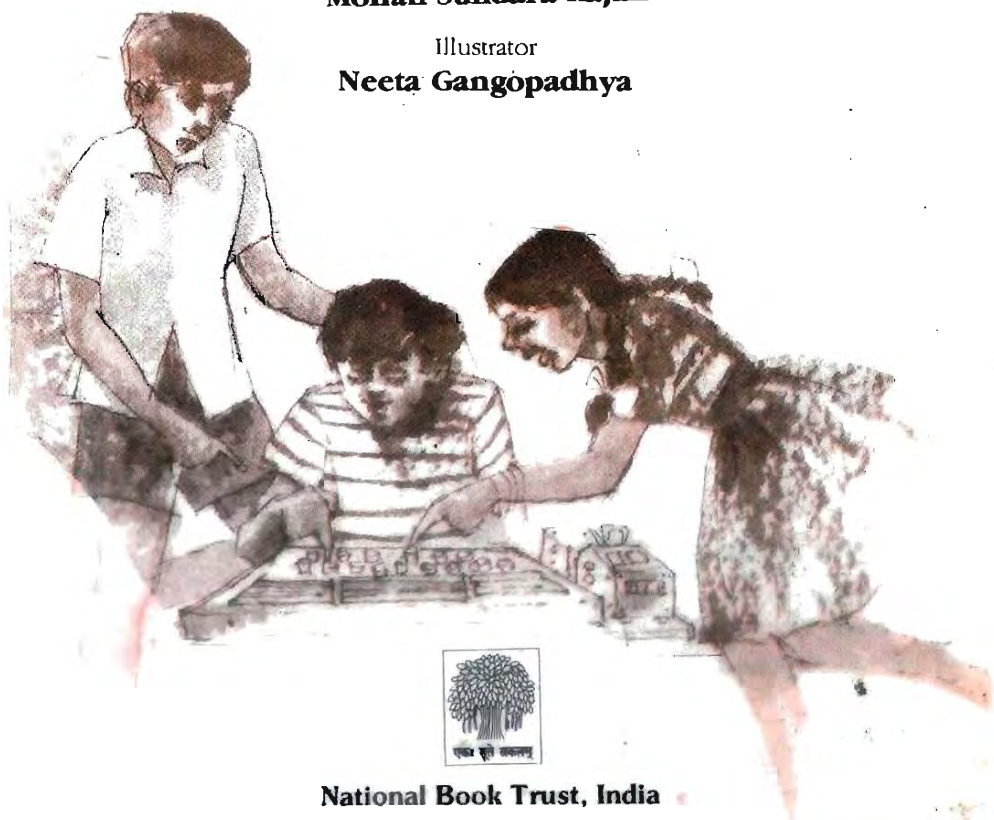
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THE COSMIC GIFT

Mohan Sundara Rajan

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UNDER THE SEA

An Indian research submarine was exploring the ocean-bed off the coast of Parson's Pygmalion Point, the southern-most tip of India. Its young Captain, Uttama, and his crew gazed entranced at the strange world under water, strangely lit here and there with many-shaped coral reefs, amidst which innumerable varieties of colourful fish and creatures of weird shapes flitted.

Then a sharp order came through. All movement must be halted. A naval exercise was planned.

The engines were turned off. All was still and waiting. Suddenly, Uttama spotted a peculiar object lying among the coral. It was smooth and of a single unusual colour among the infinite variety around it. It did not resemble any living creature. Curious, Uttama ordered it be captured.

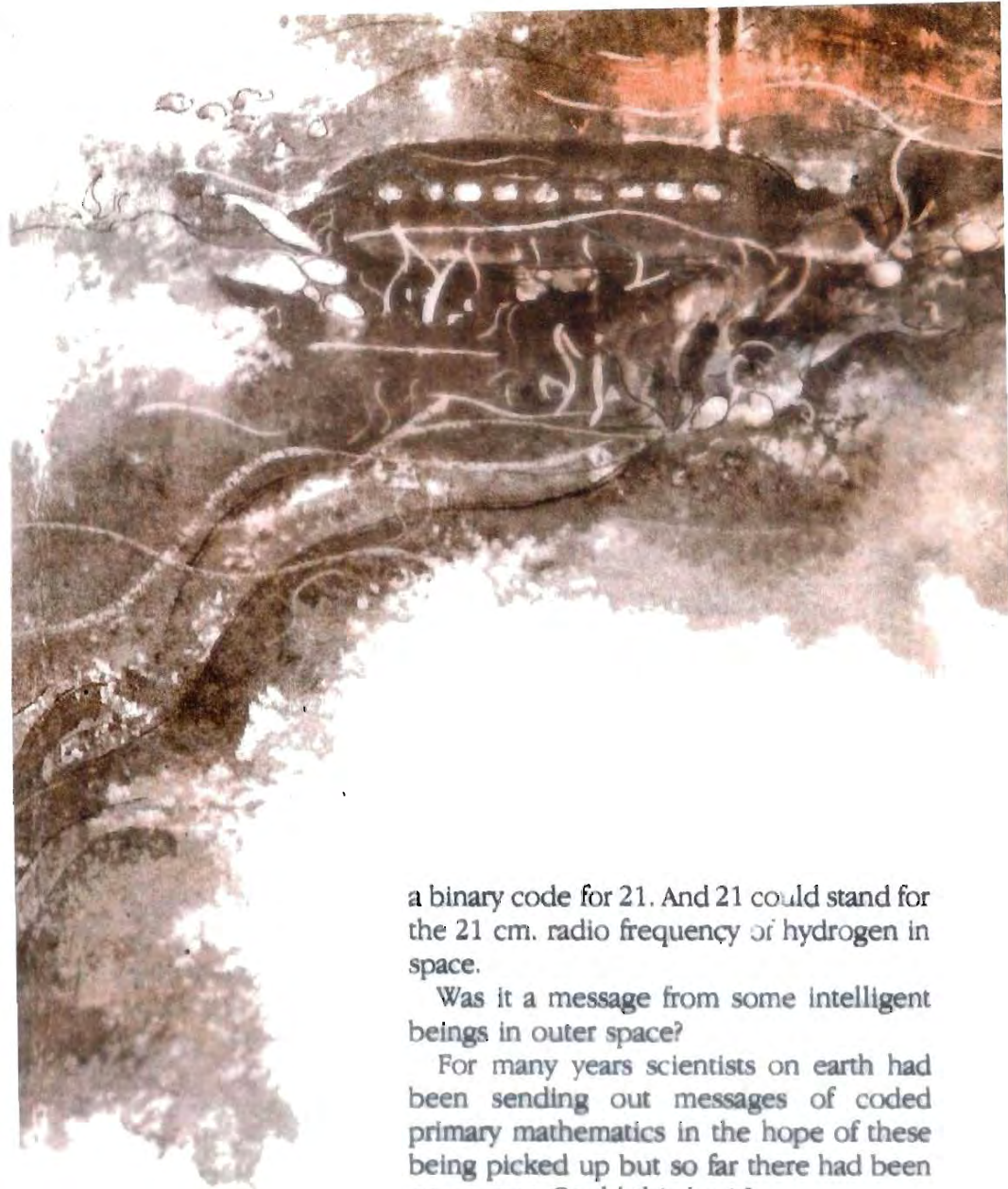
The object turned out to be a big meteorite. Uttama was delighted. He had never seen anything like it on sea or land before. Despite its journey in space and stay in water, it had retained its shape and colour.

The stand-still alert ended. Uttama was ordered to surface. He immediately telephoned his friend, Professor Maruthi of the Stellar School in the Kavalur Observatory complex and informed him about the meteorite.

Professor Maruthi was very excited. The meteorite was the largest he had ever heard of. Receiving permission to examine it Professor Maruthi began conducting tests on the cosmic relic.

As layer after layer of filmy material was removed, a clear pattern emerged, looking like 10101 which Professor Maruthi suggested was





a binary code for 21. And 21 could stand for the 21 cm. radio frequency of hydrogen in space.

Was it a message from some intelligent beings in outer space?

For many years scientists on earth had been sending out messages of coded primary mathematics in the hope of these being picked up but so far there had been no answer. Could this be it?

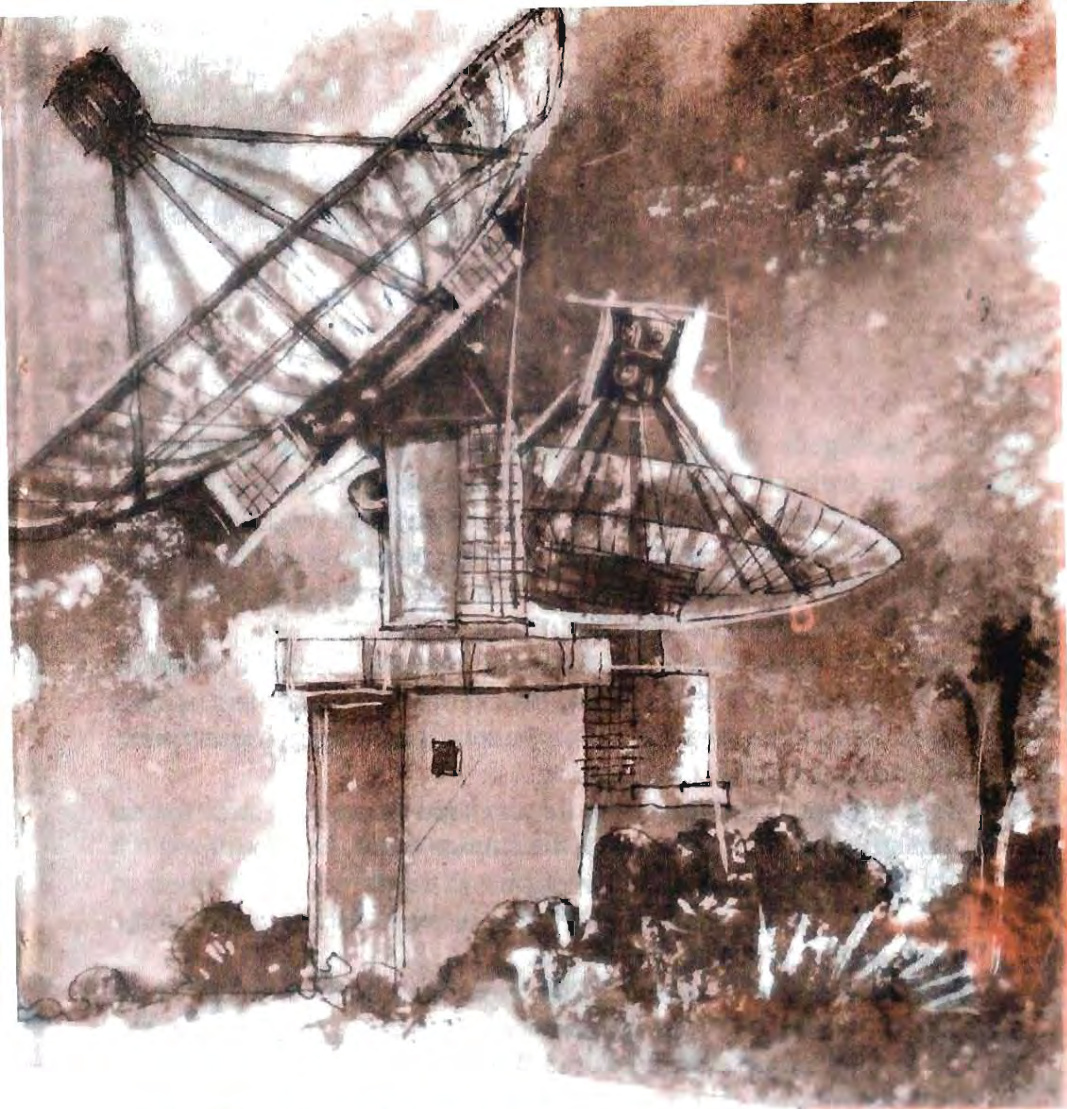


MESSAGE FROM A METEORITE

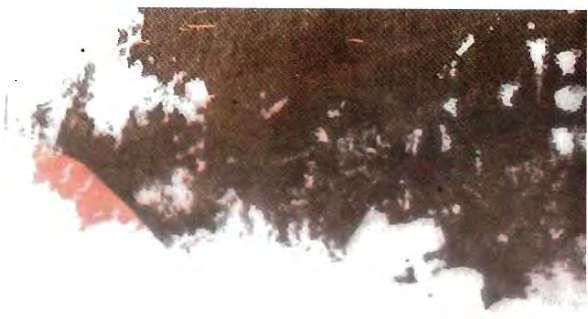
News of the meteorite and its binary content were broadcast by all radio stations in the world. Immediately, a furious debate broke out. The Americans announced that they would make special spacecraft and set off to explore the territory from which the outer space beings had sprung. The Russians, on the other hand, wanted to move cautiously and wait till fuller contact through the binary code was established.

There were also telegrams pleading for a halt to further communication lest another civilisation assess our technology as primitive. Others, however, argued that the intentions of any civilisation which could survive so long might not be evil. Contact with it need not prove dangerous and could even be greatly beneficial.

Professor Maruthi went ahead with preparations to send a message to outer space. He suggested a method to code the message that would be recognised as undoubtedly coming from intelligent beings. He said that the message could be sent in a single succession



of 'On-Off' pulses of radiation. The pulses could represent ones and their absence zeros. Thus a binary series of numbers would be transmitted. Again, these numbers could be the first twelve primary numbers, viz. 1, 2, 3, 5, 7, 11, 13, 17, 19, 23, 29 and 31. This would indicate simple mathematical knowledge which could only come



from intelligent beings. There was even a possible method of arranging such a message to give a clear description. By putting an array of 29 groups of 19 squares, for example, and by colouring the ones black and zeros white, an interesting picture could be shown, indicating the physical appearance of human beings, how the solar system functioned and other important facts.

Just then, there was a call from the Medical Research Council. Dr. Danwantri, who headed the Biochemistry Department spoke, "I understand that you are planning to send a message to outer space. I would like to make a suggestion."

Dr. Danwantri explained that he was keen to get new information on the structure and working of the human brain. He wondered if it might be possible to encode questions on this which might elicit an answer from intelligent beings who were well wishers far out in the distant depths of space.

Professor Maruthi agreed. "But how can such a complicated message be sent out?" he questioned.

Dr. Danwantri promised to draft it in a way which was simple, yet comprehensive so that anyone deciphering the code would know the exact state of development of the human brain and its problems.

The message was brought by Professor Maruthi and his colleagues to Arvi, India's first telecommunication ground station near Pune. Several dishes had been built there. Sophisticated instruments and computers enabled scientists to obtain in one minute data which in



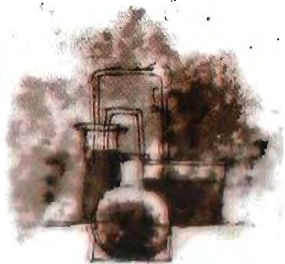
the old days would have taken 200 years of continuous sky-watch.

The count-down for the grand transmission started. The engineers carried out their check-out carefully. The sky above was kept free of all aircraft.

A cable was sent to the International Telecommunication Union in Geneva requesting them not to allow any satellite to use the frequency reserved for communicating with a possible alien civilisation.

The transmission lasted precisely three hours. The hydrogen line frequency was used with slight adjustment to avoid the background radiation. The message was sent thrice. Computer studies showed that the signals could reach hundreds of light years.

No one expected an immediate response. The engineers hoped for an answer, if any, only after 12 years. This too from a planet somewhere near Barnard's Star, some six light years away. Barnard's Star was the third nearest star to the earth. It had only a tenth of the sun's mass but showed some wobbling which could be due to planets in its orbit.



A CHEMICAL PUZZLE

Twelve years passed. People on the earth had almost forgotten about the message they had sent to outer space. Only the small group of scientists at Arvi watched and analysed the data chart every day. As the time limit approached, their excitement mounted!

But the twelfth year passed without any signal striking the yawning dishes. Spirits somewhat dampened, the vigil continued.

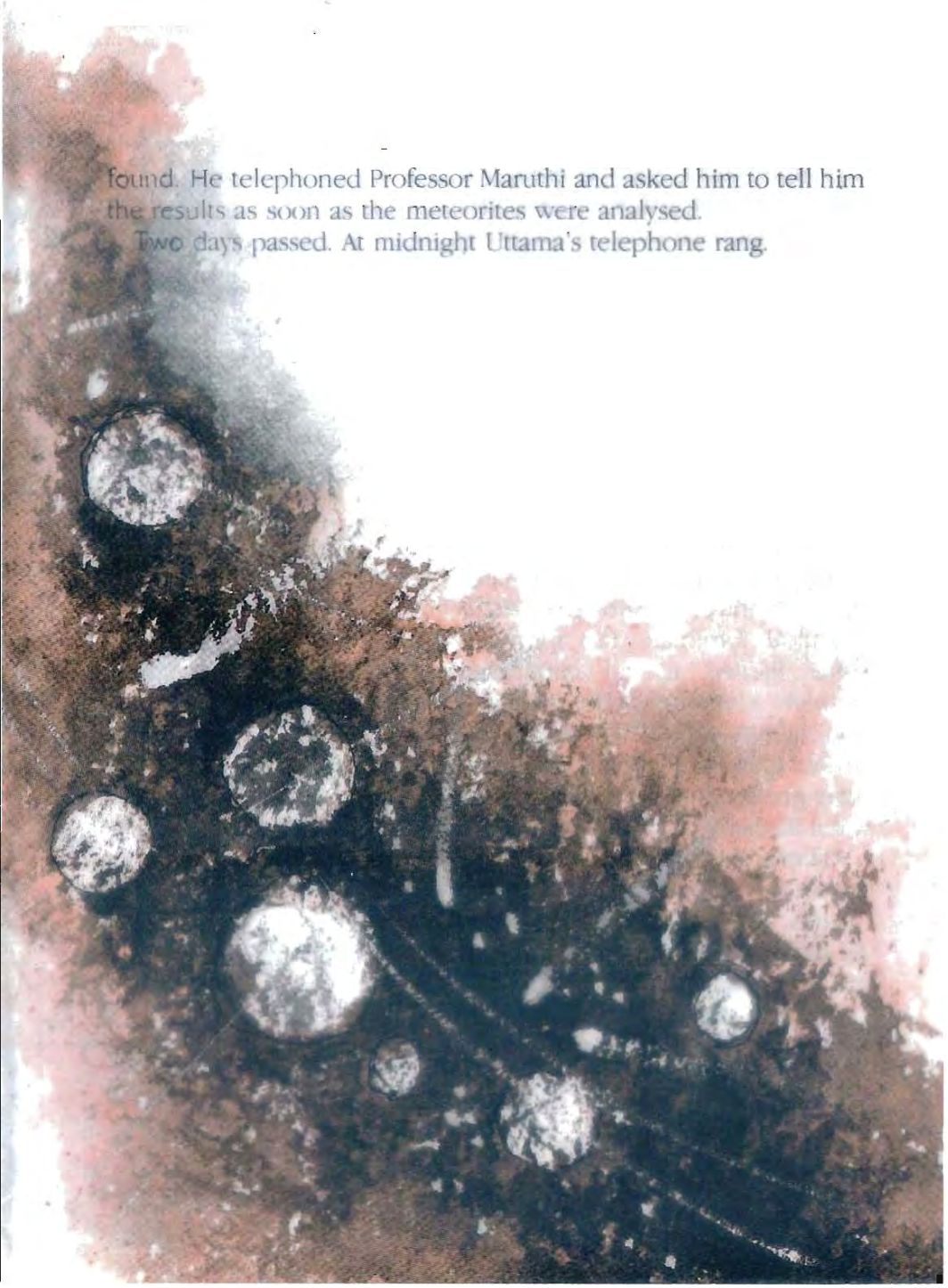
The thirteenth year was coming to a close. There was still no news. Then, on the last day of the year, the newspapers reported a shower of meteorites in Dhajala, 100 kilometres from Ahmedabad.

Some people thought the meteorites were following a 12-year cycle, while others felt that they might contain an answer to the message sent from Arvi. Did the alien civilisation prefer to use meteorites to microwaves to communicate?

Uttama thought the meteorites might be yet another attempt inviting people on earth to open a dialogue. Maybe the beings from outer space had felt that a shower of meteorites had more chance of arriving safely than that single, large meteorite he had so luckily

found. He telephoned Professor Maruthi and asked him to tell him the results as soon as the meteorites were analysed.

Two days passed. At midnight Uttama's telephone rang.



"Maruthi here. There is news. The entire message we sent about the human brain has been reproduced—in mirror image—in the meteorite."

"Fantastic! That speaks for itself about the level of technology of those who sent it. It is clear proof that someone out there, within 12 light years, did receive the message."

"Well, there's more than that, Uttama. Deep inside a meteorite, we found a number of complex chemical formulae."

After the analysis was completed, the laboratory published the chemical formulae. The formulae were flashed to all continents through communication satellites and chemists all over the world were invited to examine them. Computers were pressed into service to decode them further.

Uttama noticed that the binary 10101 for 21 was again present. "Surely, the repetition of 21 cannot be dismissed as irrelevant," Uttama told Professor Maruthi.

Did it mean that the alien civilisation wanted the earth to





report back after the formulae were tried out.

Pressure from the scientific community forced the Indian scientists to accept the challenge and try out some of the formulae in the laboratory. There was some doubt whether it would be possible to compel the conjunction of molecules in a given chemical formula. This would have to be done in a specially equipped laboratory in which sufficiently high pressures could be arranged to force the molecular bonds. Once the formulae were brought into existence, it would be possible to start further experiments into their use.

Two specially equipped laboratories were put under quarantine so that earthly contamination would not affect the experiments. Inside a big glass dome, the primitive earth's atmosphere had been created. It consisted of hydrogen, water vapour, ammonia and methane—not the nitrogen-oxygen mixture of today's atmosphere. This primitive mixture was circulated through an electrical discharge for several days. This was a virtual re-enactment of evolutionary history of many millions of years. The result was breathtaking.

It appeared that here were new combinations of nucleic acid and protein, the foundations of all life. Professor Maruthi's mind began to race. Nothing like this had ever appeared in early investigations of meteorites. It seemed that there might be new amino acids in turn building up a new protein structure. This was the triumph of the chemical basis of life.

"You have months of experiments ahead of you!" he said breathlessly to Dr. Danwantri.

Months of work went by in various laboratories all over the world. Difficulties and discussions arose over the interpretation of the formulae, but at last one of them produced something new in an amino acid.

How would this 'new' amino acid work on the protein base of living matter?

"Amino acids including the newly discovered one, should be tried on humans," American scientists suggested. The Soviets, however, warned against such a use. They feared the formulae would turn into a virus and may have been deliberately sent from outer space to annihilate man from earth.

Caution won the day. It was decided to first try the new amino acid on animals.

A group of rats were put on a special diet mixed with the amino



acid. Within a few weeks their memory had improved markedly. They could now run through a maze after only one exploration. Encouraged by the experiment, biochemists decided to try the chemical on human beings. But, no one volunteered for the experiment.

The biochemists were desperate. They sought the permission of the doctors of a mental hospital to try the amino acid on some cases given up as hopeless. They argued persuasively that the amino acid could do no harm. On the other hand, it stimulated the brain. Nothing should be more welcome. The permission was given.





A GENIUS DISAPPEARS

Two boys, Ramu and Laxman, and a girl, Tarangini, whose intelligence had never fully developed and apparently never would were chosen for the experiment.

Within a month, their I.Q. began to rise. They began to speak in clear sentences and soon were trying to read. Everyone was overjoyed.

After a few more weeks, the children asked for advanced technical books. Of course, they got the best help at once. Child specialists, who visited them, were filled with awe.

In two years, the children were able to solve mathematical problems and answer complex engineering questions.

Though they laughed at jokes, the strange thing was that the three children seemed not to show any affection or anger. Nor did it seem to hurt them if they fell down or bumped or bruised themselves.

"This is definitely due to the new amino acid," said Dr. Danwantri. "But how exactly it interacts with the chemistry of the human brain is still a mystery."

The mass production of the amino acid was strongly advocated to make a super-intelligent race. But further experiments were unsuccessful. No amount of care and accuracy would produce the scarce amino acid.

"First we thought something might have gone wrong with our apparatus," said Dr. Danwantri. "But the experiment has been



repeated in the best laboratories all over the world. The result is still negative."

"Maybe the aliens from outer space didn't want us to have too many super intelligent people," said Professor Maruthi.

Dr. Danwantri said, "You know that second message we sent giving them the picture of what's happened and asking for details of



their world—I wonder whether that got through—to anywhere!”

The conversation was interrupted by the shrill voice of Laxman who had burst into the room. For one who hardly showed any emotion, he sounded unusually tense. “Ramu is missing. I don’t know where he is. Ramu is missing...” he shouted.

The news spread like wild fire. A thorough hunt was organised. Every conceivable place was searched. Every family was asked to look for him. All airports were put on the alert. Special police squads checked all children boarding boats from Sriharikota. No one answering Ramu’s description was found. Interpol was alerted. Satellites flashed his picture on TV on every continent. Big rewards were announced.

Days passed and there was still no news of Ramu. Criticism of poor security arrangements resulted in Laxman and Tarangini’s liberty being heavily curtailed.





People believed that some day Ramu would reappear. But this was more wishful thinking than any calculated prediction.

People on earth forgot Ramu. They no longer stared at every child bearing his features. He had become a legend.

Then suddenly, all over America, sirens were blasting into the air. Was it a red alert, a nuclear attack? The waiting planes, loaded for counter-attack, were revving up. Cars and trains stopped. People ran for cover, terrified of a nuclear blast. Then, just as suddenly, it was over. Radios and loudspeakers calmed down the panic, explaining how it had all come about:

"This morning, the secret control room of the nation's biggest missile silo was visited by a non-European child. It is a mystery how a child could pass through the electronic check. The guard sounded the alarm, which automatically activated the alert. There is no need for panic."

Professor Maruthi immediately rushed to the missile base. Entry was strictly restricted. He could communicate with the man inside only through an intercom.

The guard adamantly refused to reveal details about the child. "But it may be our missing Ramu—our genius," Professor Maruthi shouted into the mike.

The guard at the control room was unmoved. "We have several geniuses here, sir. I can't let you in."

Fortunately, at that moment, a friend, Dr. Yug, who worked in the control room, came out.

After Professor Maruthi had explained the problem, Dr. Yug offered to go in and verify whether Ramu was inside. He had seen a young boy who fitted Professor Maruthi's description in the laboratory earlier.

The heavy door of the control room was shut and once again the professor and the guard stared at each other in silence.

It was an anxious wait. At last a beaming Dr. Yug emerged and informed his friend that the child inside was indeed Ramu. Professor Maruthi was delighted. The cosmic gift was alive!

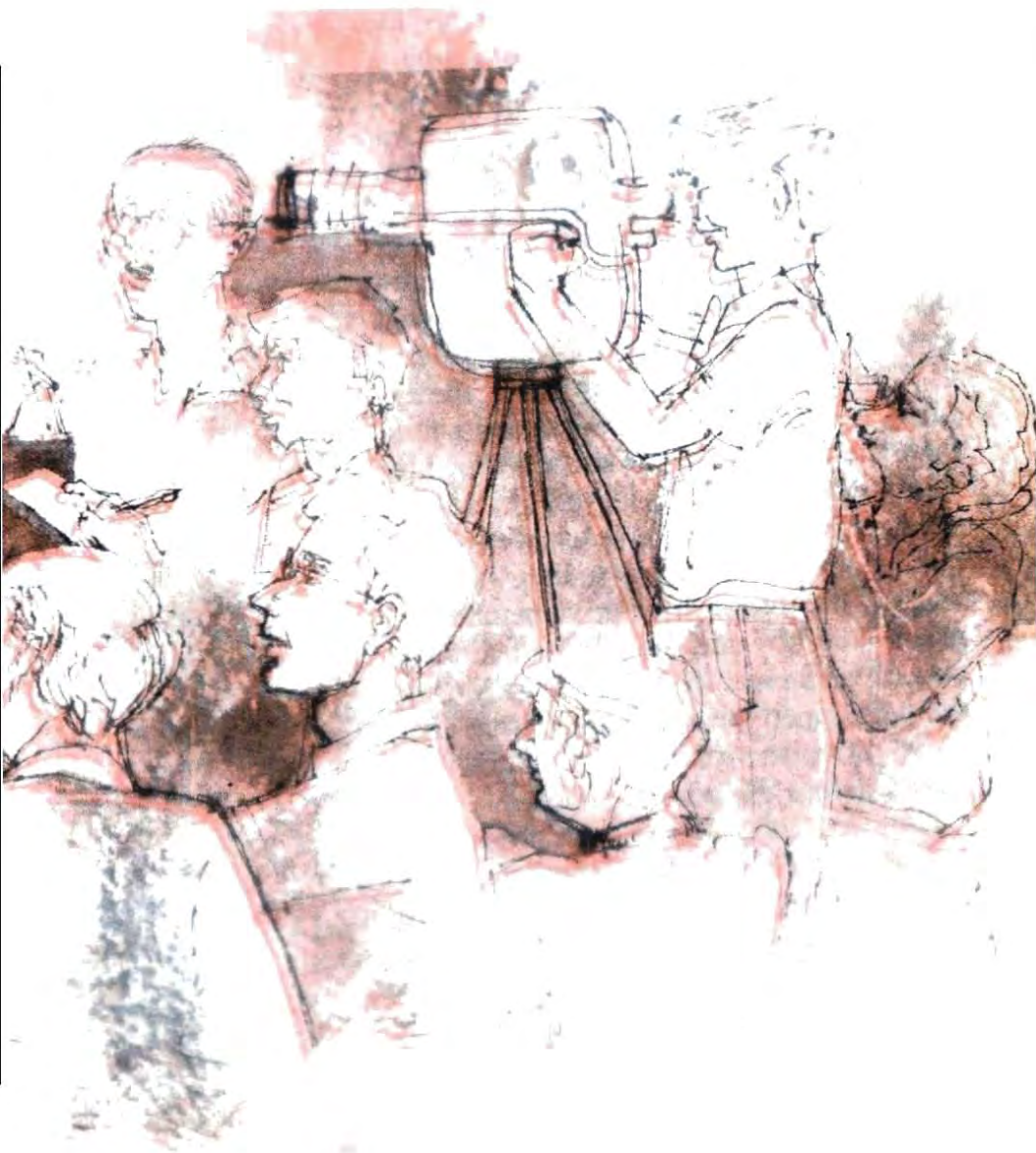


SHIPS AND MISSILES IN TROUBLE

Laxman and Tarangini seemed totally unconcerned about the disappearance of their friend, Ramu. Their faces showed no emotion. No one knew what they really felt—if indeed they felt anything.

Professor Maruthi's disclosure of the whereabouts of Ramu was greeted with joy. But there was not a glimmering of a smile on the faces of his two young friends. They were busy with some intricate mathematical problems.





Shortly after his arrival from the United States, Ramu was seized on by the press. He answered a volley of questions on his escapade. Asked why he went inside a dangerous zone, he replied, "I knew it was a bit risky. But I thought I should go ahead as it was the key to peace. The nuclear arsenal of both sides is based on fear."

There were questions as to how he got into the room. Ramu narrated, "Actually, the place being a missile control silo was well guarded. But I had to get in. Of course, I had to. Well, I got to talking with one of the top brass. At first he thought I was just a little boy. Then I went on, you know, telling him things. About problems he was on. He took me into his office. He made tea. We went on talking; he forgot I was a little boy. He showed me things. Then he remembered I was a little boy and thought he had some chocolates for me. While he was looking for them, I slipped through. I knew what I had to do. I'd worked it all out. I just set off what would defuse the system. Simple."

"But what did your top brass friend say?"

"He didn't understand, not at once." Ramu laughed. "He was so upset, almost crying. You see, I'd smashed up all his work."





"Weren't you sorry for him?" one of the reporters asked.

"No. I had done the right thing. He ought to have seen."

The reporters were taking down every word. One of them asked, "But why did you want to defuse the system?"

Ramu said, "I did it to free the world of the threat of a nuclear war."

"But you could do it only in one silo. What about others?"

"Well, my idea is to defuse them all."

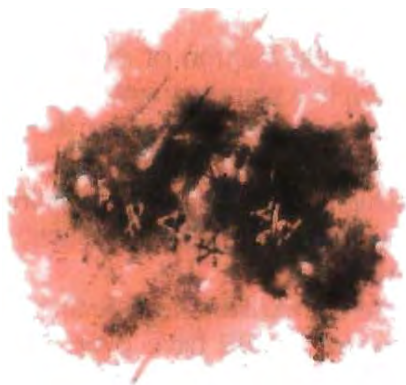
"You'll never succeed! The realities are different."

"Just see! It will be done!"

Meanwhile, another problem had arisen. Enormous oil slicks had been building up round the harbours of the world, holding up shipping. No government had managed to clear them effectively. They were a menace to all sea and coastal life. What could be done? Could the children help? Laxman and Tarangini had refused to do anything without Ramu, but now he was back. Captain Uttama came to see them. He explained about the oil menace, "Can you deal with it? Will you do your best?"

"We shall do our best," said Ramu coldly. "We will try but we cannot promise results. And even if we find the solution we will only reveal it when all the nuclear missiles are defused."





SOS TO STARS

The children began their analysis of the oil pollution. They studied the various methods which had been tried and failed. A new technique was evidently called for to solve the problem. But ultimately even the three gifted children had to plead helplessness. Maybe the beings from outer space would be more successful? If so, only the children could draft a quick question. The children agreed, but imposed the same condition. Before the solution was put into operation all nations must defuse their nuclear arsenals.

When this ultimatum was made public some powers agreed. Others, however, dragged their feet. But the three children were adamant. In the end the nations had to yield.

After getting the assurances they wanted, Laxman, Ramu and Tarangini began to work on their message to outer space. But they were not left in peace. People on earth were curious to know about other worlds from which an answer might be forthcoming. So they pestered the children with questions about the number of planets on which life could be found. Tarangini came up with the arbitrary

number of 10,000. She first enumerated the fraction of stars with planetary systems, the number of planets in a planetary system with conditions suitable for life, and the fraction of planets on which there was the possibility of complex life forms. This was followed by the fraction of planets with intelligence which had attained the capacity for inter-stellar communication. Ramu also calculated the average life-time of a technological civilisation.

A research scholar asked, "How would you explain their life time?"

Ramu replied, "The higher civilisations would have overcome several problems besetting earth people. Out there, non-earth beings would have corrected environmental degradation, countered the weapons of mass destruction and controlled population."

"Several civilisations must be superior to that of our own world," Ramu continued. "Some of them have ideal conditions for life to take shape."

By now the message that was to be sent to outer space was ready. It was specially coded. It took three hours to transmit and was directed towards Barnard's Star.

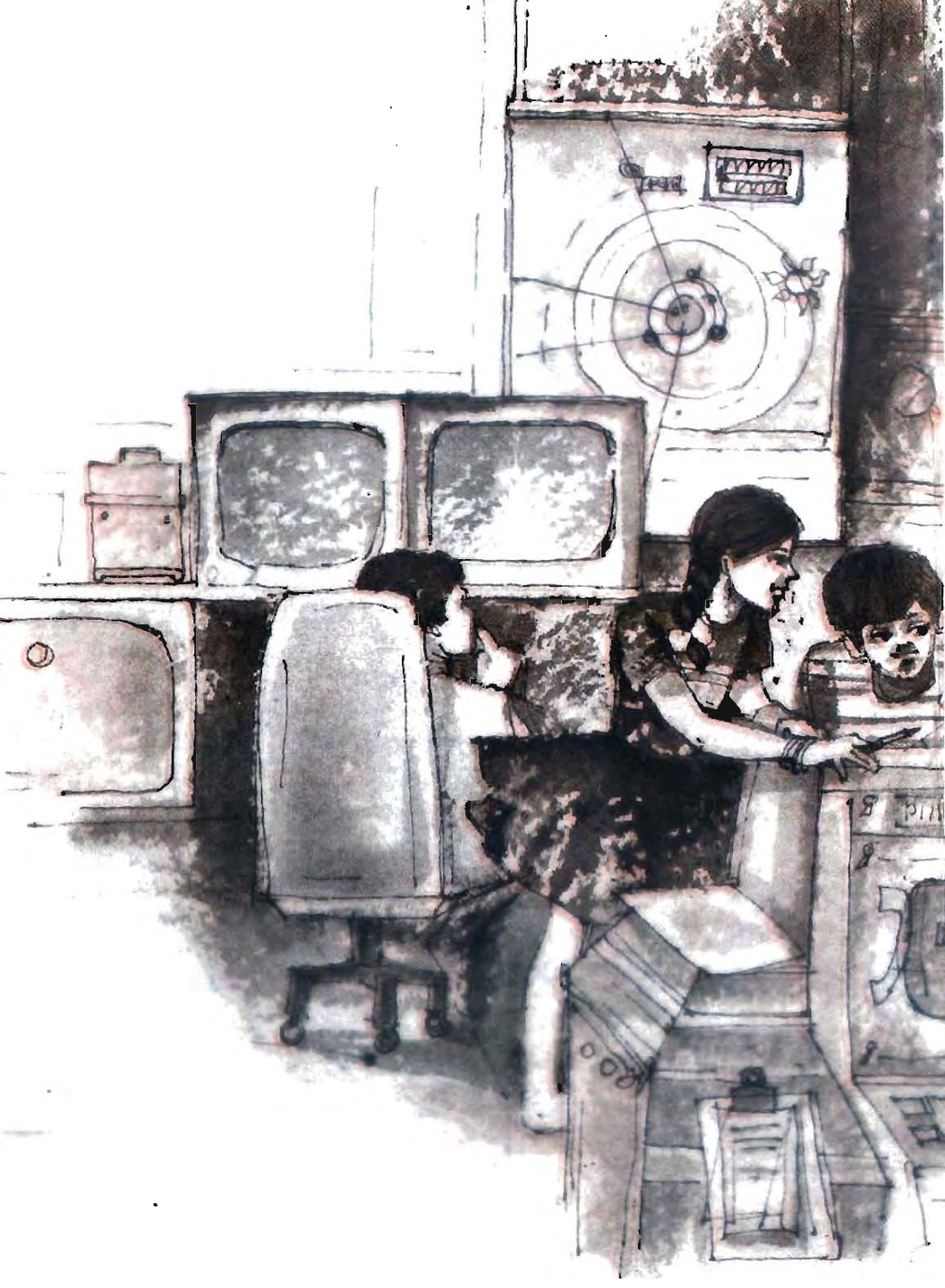
The message was kept secret. But one point leaked out. The message, it appeared, also contained a plea that an extra-terrestrial civilisation should not send any micro-organisms to earth. This request had been added by the scientists at Arvi to the main communication seeking a solution to the oil problem.

There was a sigh of relief in scientific circles. People had been afraid of harmful bacteria from outer space spreading mysterious undiagnosable viruses and diseases.

At last the message came back.

Laxman, Ramu and Tarangini analysed it with the help of complex computers. They soon discovered the formula for disintegrating the





oil slicks even though its use for this purpose was not specifically mentioned. What was more, the formula could help with many other equally important problems which would benefit people on the earth.

Meanwhile, a group of people sat nervously analysing the pros and cons of the new breakthrough. On the one hand, the possible clearing of the world's sea routes was welcome, on the other, however, was the promise of defusing the world's nuclear arsenals first. This would mean a loss of several fortunes to the arms dealers. There had to be some way to prevent this. The arms dealers held a secret session and planned their strategy.







A TERRORIST PLOT

"Ramu, Laxman, Tarangini!" the names were repeated several times. There was no response. No trace of the three could be found.

An alarm was sounded. All possible exit points were checked. All three children had disappeared.

Speculation started. Some said that they were too clever to accept the naive promise of half-hearted people about defusing bombs and missiles. It was even suggested that they might have taken off for some other world.

Suddenly there was news.

Some of a group of terrorists had been caught red-handed, while trying to plant a time-bomb in an airport. Intense questioning by the police revealed startling information about the children.

The terrorist gang, known as Group X, admitted that they were engaged by the International Arms Dealers' Association to kidnap the children. Having failed to gain entry into the children's house, they decided to lure them out by taking advantage of their weakness for intellectual games. Between them they had worked out a very



ingenious form of super-chess, but with a flaw in it which the children would notice almost at once. Two of the gang, disguised as theoretical mathematicians, then came to pay the children a visit. After some pleasurable arguments, they all went out into the garden where there was an ancient chess-board of black-and-white marble. Tarangini wanted to demonstrate the flaw so that even the stupidest could see it.

But while they were all laughing, the rest of the gang, which had been hiding among the bushes, pounced. They hurried the children from place to place. They were hardly able to think. But at last, they were left in the dark. "Follow me!" whispered Tarangini. All of them, but she especially had developed the capacity to sense infra-red light. They were not afraid and managed to slip out. When the terrorists found they had gone, it was pitch dark outside and they completely lost track of their captives.

It was these terrorists who were now in police custody. While they were still being questioned, news came from the satellite launch centre that some unknown people had gone into the control room and taken off in a shuttle. They were unable to identify the people, who had impersonated space passengers.

Professor Maruthi at once realised that they could be none other than the three gifted children. He regretted that man had deprived himself of this golden opportunity of gaining dramatic new insights into the working of the human brain.





A TRAGEDY

The chief of the night team at the Satellite Watch Centre in Nainital sat up with a jolt. One of the satellites had gone haywire. It was not following its predicted orbit. The signals from it too were different. There were frantic consultations.

"There seems to be a war up there!" exclaimed the chief of the Master Control. "A satellite is being diverted!"

The Instant Intercom clicked. Simultaneously, several satellite stations which had watched the phenomenon, were on the line, exchanging data, in accordance with an agreed code of conduct.

Professor Maruthi was the first to suggest that the irregularity in the satellite's orbit might be the work of the three children. This suggestion, however, was quickly refuted. Surely the children were not skilled enough to carry out a mid-course correction to a spacecraft in orbit.

Suddenly a voice, loud and clear, was recorded from space. It was immediately recognised as that of Ramu. He said he and his two colleagues were safe and well in orbit. He did not directly refer to the

kidnap attempt but said the earth still had people with evil designs.

His brief caustic comment was received with mixed feelings. There was relief that no harm had befallen the three children. Their old friend, Captain Uttama, was sad that they should be exposed to such violence. The experts who were struggling with oil pollution were specially disappointed. The last chance of clearing it was lost.

The remaining terrorists, who were still at liberty, got panicky. They feared that the children would reveal their identity. In any case, their mission to destroy the children had not succeeded and they had been paid only half the money promised to them. The arms dealers were very sore with them. There were even hints of a tip-off to the police about their hide-out.

The terrorists were desperate. They decided that they had to get the children. They hired a special shuttle spacecraft and lifted off. An experienced astronaut on board worked out the mechanics of orbit and rendezvous.

They closed in! The craft with the children was only a hundred metres away!

The terrorists could not come out from their specially insulated chamber with artificial gravity, but they had worked out how to demolish the other craft and capture the children.

Tarangini was the first to notice the approach of another spacecraft. Their friendly signals were reciprocated. But Tarangini's attention was drawn to several peculiarities about the other craft. She and her friends became increasingly suspicious.

The children radioed the details of the unknown craft. By now they had realised that it must belong to the enemies of their grand plan. They repeated their demand that the nuclear missiles on the earth must be defused and destroyed. They offered to transmit the

formulae for fighting oil pollution, after their demand had been met.

News from a space centre confirmed that the terrorists were indeed aboard the craft near the children in orbit. Dr. Danwantri and Professor Maruthi issued a statement appealing to the world's scientists to put an end to the siege of the children. The United Nations General Assembly passed a resolution condemning the terrorists. They were ordered to come down immediately. But there was no way of enforcing the decision.

The confrontation continued. The scientific community became anxious.

'Operation Rescue' began. A huge shuttle took off. The co-pilot was Captain Uttama. It was announced that it would ensure the return of the children but the exact strategy was kept a secret, lest the terrorist gang foil it.

As the huge spacecraft came near the children, greetings were exchanged. The terrorists began to deorbit. The immediate danger was averted.

The scene was beamed back live on television from the spacecraft to millions of viewers on earth. Captain Uttama began to space walk to inspect the craft with the

children. He peeped inside the cabin and reported that the children were in good shape. Everyone looked forward to their safe return.

Suddenly, there was an alarm. Captain Uttama was ordered back. A shower of meteorites was sighted at a distance of a million kilometres in space. The children must be immediately rescued.



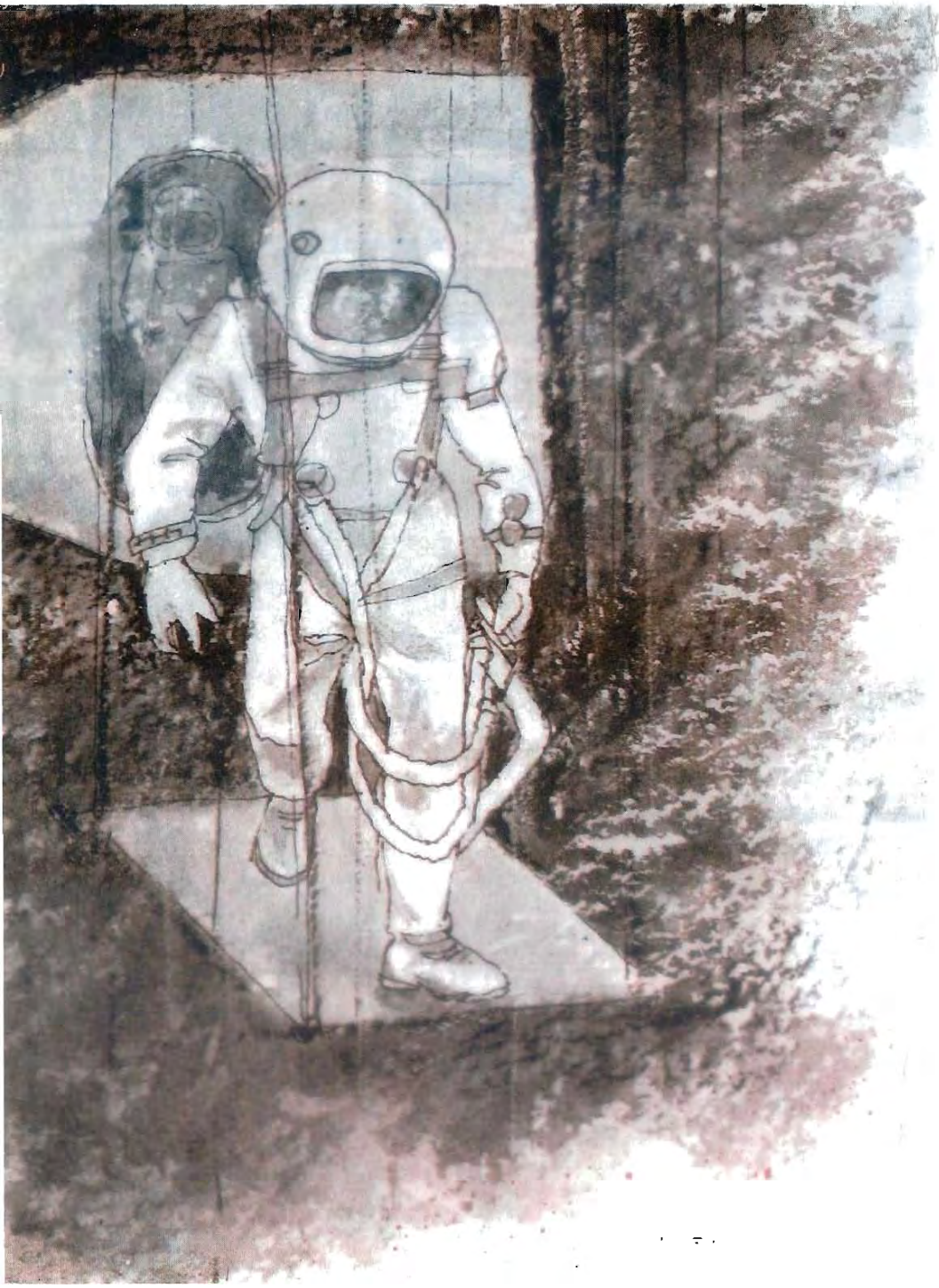
An SOS was sent to them. Ramu understood the danger but said they were still working on the formulae sent by the beings from outer space to solve the oil pollution problem on the earth. That meant some delay. The concern shown by the children for the welfare of mankind even when in danger themselves moved many hearts. There was all the more anxiety that the children should come into the safety of the big craft without delay.

The children were advised to leave the calculations, put on their space helmets and hurry. The meteorites were coming nearer and nearer.

As Ramu came outside, Captain Uttama, now back in the big craft, extended cables and radioed instructions using them. The two other children were busy fixing the plates for registering the micro-meteorites.







There was a sudden flash of fire, visible for just a second. Captain Uttama at once realised that something terrible had happened. A micro-meteorite had pierced Ramu's heart.

Captain Uttama reacted immediately. The cable and the platform caught Ramu and gently brought him to the big shuttle. But alas, Ramu was pronounced dead. On his body were the formulae solving the oil pollution problem, stained with his heart's blood.

Earth was shocked to hear of the tragedy. What the terrorists had failed to do, a tiny stone from the cosmos accomplished in no time. The U.N. General Assembly observed a minute's silence. Glowing tributes were paid to the young hero.

There was a demand for the safe recovery of the other two children. An appeal was made to the Big Powers to launch an immediate operation to save Laxman and Tarangini. It was decided to radio the plan to them before sending the spacecraft. But the reply was unexpected.

"We have decided not to return to earth," said the message from the children. "We are capable of sustaining ourselves in space indefinitely. Ordinary human astronauts have been in space only for a few years. We are determined to explore the limits of human endurance in zero gravity."

The children's reply was relayed to all satellite monitoring stations. The arms manufacturers and terrorists sighed with relief. But Captain Uttama and Professor Maruthi were worried. Laxman and Tarangini were in a shuttle with only a limited supply of food and oxygen. Was it possible that through their super-intelligence they could cut out all necessary life-sustaining needs? Was this what super-intelligence had made them capable of?





Professor Maruthi asked Captain Uttama, "Did you notice that neither Tarangini nor Laxman showed any feeling for Ramu? Have they forgotten him so soon?"

Captain Uttama answered, "I believe there was something in their make-up that stopped all emotion which seemed unnecessary. Here surely is something else which comes of being super-intelligent."

Meanwhile scientists were suggesting that they should examine Ramu's brain.



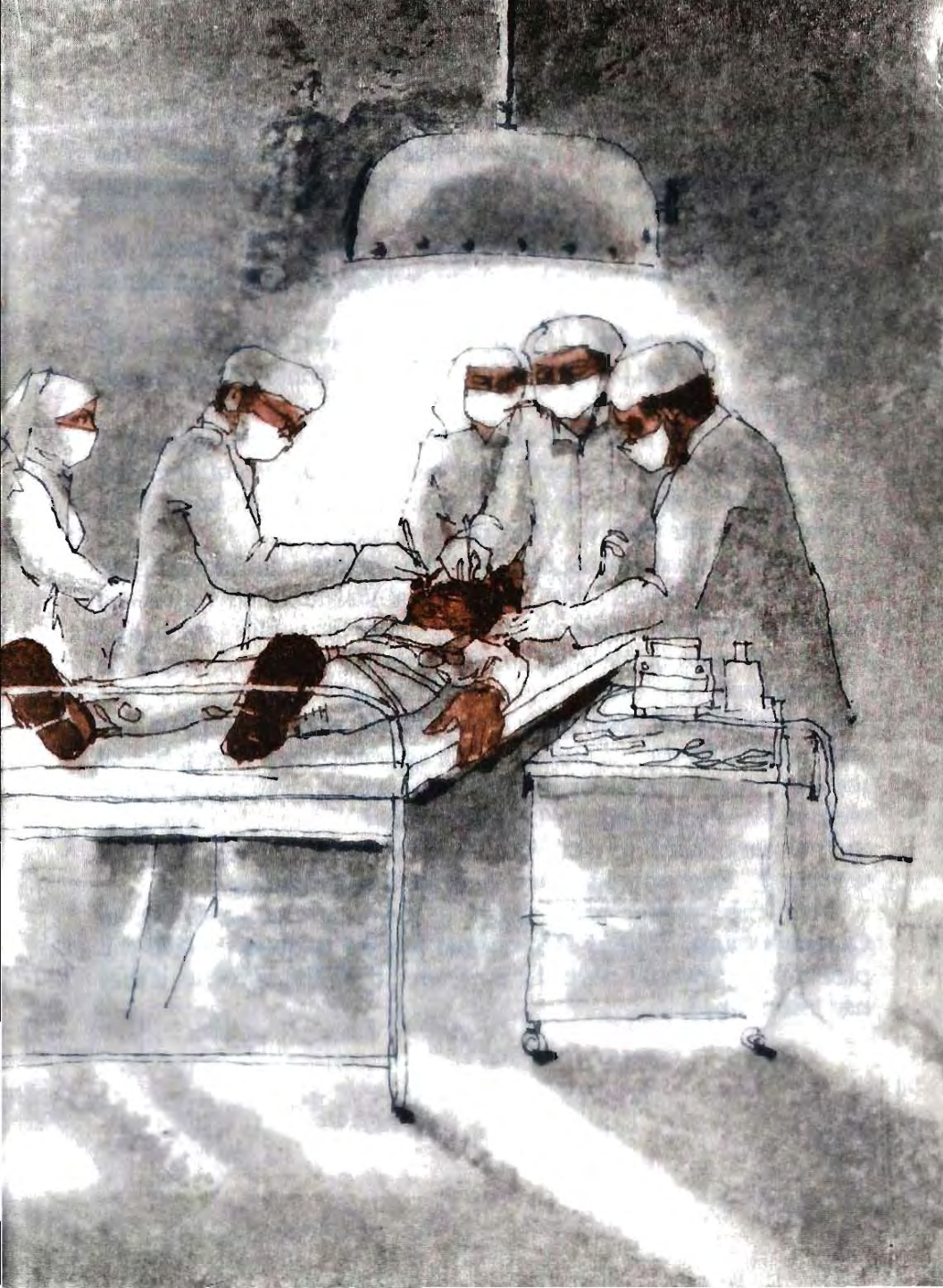
HOW IT SEEMED TO THE SCIENTISTS

Ramu lay dead, a strange smile on his face. Dr. Danwantri realised that it was essential that his brain should be examined. There might be something which would mark super-intelligence. He remembered the children as they had been, barely human, and how they had grown into something beyond common humanity.

A medical team opened the brain with great care, attempting to assess the hemispheres and lobes of this strange brain. Was it in any way different? Was it for instance, bigger? No, it was decided, in fact if anything, it was a little smaller than normal. But still intelligence is a function of the entire brain. Yes, the frontal area was well developed, and the thalamus and hypothalamus were well developed. All the neural connections seemed particularly firm. In fact it was a normal brain, but—

"Yes?" asked one of the doctors.

"Ramu's brain clearly indicates that the evolution of the human brain has not stopped," the chief of the team said. "We can say that any brain has room for anything we chose to put into it. But



arrangement and memory and expectations are the channels through which it is done. Once the process of intelligence started, each of the three children bore down on the others with a weight of expectation and a piling on of intellectual memory."

"And the emotions never developed, not even with Tarangini?"

"No. They had lost their importance. Perhaps we make too much of them."

Captain Uttama sighed. He had been so close to the children; he had loved them, but had they ever loved him? Would he ever know?

"Will there be others?"

"Well, as you will remember, certain formulae were followed and the results, after the rat experiment, were tried on the children. But we were never able to repeat the process. We do not know why. Perhaps, in some way, we were not meant to."

Meanwhile what was happening to the satellite with Tarangini and Laxman? The Satellite Observatory at Nainital reported with some worry that the two children were now out of the orbit of earth. And this was in spite of the watching satellites all round their craft!

There/was, however, a message. Tarangini said that she and Laxman would still help, as far as they could, with any problem that was likely to tilt the balance of nature on earth. They were glad that the oil pollution problem was now being solved, even though there were still nuclear missiles left in some countries. But now it was up to the people of earth to deal with them. Why did they fuss so about terrorists? "They only kill a few people; that is nothing."

When the message was brought to them, Dr. Danwantri said to Captain Uttama, "There! Her normal feeling is quite cut off. But probably they would never have escaped from the terrorists if they had been afraid."



The message went on: "So we leave it to you. It would be a pity to kill millions of people. That would upset the balance. See to it. We are going to visit some of the other civilisations in the universe. They may have more sense than the earth people; they may be in balance with nature."

"I hope so. I hope so very much," said Captain Uttama.

Ten years went by. The people of earth still struggled with their problems. But all could be solved with goodwill and intelligence. No more was heard from the children. But exactly at the end of the twelfth year, there was an extraordinary increase in microwaves. The new and bigger Arvi dish recorded the signal in detail. It was firmly established that the source of the microwaves must be a planet near Barnard's Star. The message itself was in the binary code and was definitely a reply to the second one sent from earth.

When the code was finally analysed it contained descriptions of the life on that far planet. It was carbon-based as that on earth is, but the bipeds there had nothing to equal the human eye. Their eyes were only sensitive to the infra-red—as the children's eyes had been. Moreover, it seemed that the





brains of the beings there were far more developed than any found on earth. It was decided to send two un-manned spacecraft with infra-red cameras on board to probe further into this infra-red planet. The spacecraft were to be named Tarangini and Laxman after the lost children.

But were they lost? And did this mean that the meteorites with the first message and then with the second were not from this strange infra-red planet but from some extraordinary interception by some unknown power aimed at producing super-intelligence? Captain Uttama, now an old man, said to himself: the children are not lost. When things are at their worst, Tarangini and Laxman will come back to us.



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